

In the Claims:

1. (Previously presented) A test module for testing the susceptibility of an integrated circuit design to latch-up, the test module comprising:
a plurality of test blocks, connected in parallel, each test block including an injector block for applying a stress current or voltage to the respective test block, and
a plurality of sensor blocks located at successively increasing distances from the respective injector block, each sensor block including a PNPN latch-up test structure.
2. (Previously presented) The test module as recited in claim 1, wherein each test block is connected to a bondpad, said stress current or voltage being applied to said injector via said bondpad.
3. (Previously presented) The test module as recited in claim 1, wherein said injector blocks are connected between first and second supply lines.
4. (Previously presented) The test module as recited in claim 3, wherein contacts of said sensor blocks are connected between third and fourth supply lines, different from said first and second supply lines.
5. (Previously presented) The test module as recited in claim 1, wherein each PNPN latch-up structure includes an N^+ and a P^+ hot-active, which hot-actives are connected to respective probe sensor lines.
6. (Previously presented) The test module as recited in claim 1, wherein each of said PNPN latch-up test structures includes a heater.
7. (Previously presented) A test module according to claim 6, wherein said heaters comprise polysilicon rings located around respective PNPN latch-up test structures.

8. (Previously presented) A method of testing the susceptibility of an integrated circuit design to latch-up, the method comprising:

 providing a test module comprising a plurality of test blocks, connected in parallel, each test block including,

 an injector block for applying a stress current or voltage to the respective test block, and

 a plurality of sensor blocks located at successively increasing distances from the respective injector block, each sensor block including a PNPN latch-up test structure, applying a stress current or voltage to one or more of the injector blocks, and obtaining resultant current measurements at one or more of the respective sensor blocks.

9. (Previously presented) The method as recited in claim 8, further comprising,

 disconnecting said sensor blocks during application of said stress current or voltage to one or more of said injector blocks, and

 obtaining current measurements at said injector blocks to determine the susceptibility thereof to latch-up.

10. (Previously presented) The method as recited in claim 8, wherein an injector block or a sensor block is determined to be susceptible to latch-up if a current measurement therein exceeds a predetermined threshold.

11. (Previously presented) The method as recited in claim 8, wherein sequential current measurements are obtained at each PNPN latch-up test structure of a sensor block.

12. (Previously presented) The method as recited in claim 8, wherein each injector block and each sensor block can be independently biased.

13. (Previously presented) The method as recited in claim 12, wherein each PNPN latch-up test structure can be biased independently.

14. (Withdrawn) A test module comprising:

- a plurality of external bond-pads each connected to respective supply voltage and ground lines;

- a plurality of test points connected in parallel, each of the test points including a bond-pad;

- a plurality of injectors for applying a stress current or voltage, each of the injectors connected to one of the bond-pads of the test points and each of the injectors connected to the respective supply voltage and ground lines of one of the external bond-pads;

- a plurality of sensor blocks each of which is connected to one of the injectors, each of the sensor blocks including a PNP latch-up test structure for measuring latch-up susceptibility of the test module, the sensor blocks connected to the respective supply voltage and ground lines of another one of the external bond-pads.

15. (Withdrawn) The test module of claim 14, wherein each of the sensor blocks includes a plurality of PNP latch-up test structures, the plurality of PNP latch-up test structures of a respective one of the sensor blocks located at successively increasing distances from the injector connected to the respective one of the sensor blocks.

16. (Withdrawn) The test module of claim 15, wherein each of the sensor blocks includes a plurality of polysilicon rings each of which is located around one of the plurality of PNP latch-up test structures, the polysilicon rings adapted to act as heaters.

17. (Withdrawn) The test module of claim 14, wherein each of the PNP latch-up test structures includes a P-Well contact that is connected to the ground line of the another one of the external bond-pads and an N-Well contact that is connected to the supply voltage line of the another one of the external bond-pads.

18. (Withdrawn) The test module of claim 14, wherein each of the PNP latch-up test structures includes N^+ and P^+ hot-actives that are connected to respective probe sensor lines.

19. (Withdrawn) The test module of claim 14, wherein each of the injectors includes a plurality of transistors.